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Format No: CP/TF/01

TEST REPORT OF FINE AGGREGATE

Lab ID	:	**CP-2022-09-12-01** **Date: 15-09-22**
Project Name	:	PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants
Agency	:	Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045
Customer's Reference	:	EE(Project)/Ynk Zone/WO/020/2022-23
Date of Receipt	:	12-09-22
Sample Type	:	Fine Aggregate (M-Sand)
Reference to BIS codes	:	IS 383 : 2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1, 3) RA2012 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption
Date of test	:	12-09-22
Total weight taken	:	1000 grams

Sl.no	Sieve Size	Weight Retained (gms)	Cumulative Weight Retained (gms)	% Cumulative Weight Retained	% Passing	Requirement as per IS 383:2016			
						Grading Zone I	Grading Zone II	Grading Zone III	Grading Zone IV
1	10 mm	0	0	0.0	100.0	100	100	100	100
2	4.75 mm	27	27	2.7	97.3	90-100	90-100	90-100	95-100
3	2.36 mm	55	82	8.2	91.8	60-95	75-100	85-100	95-100
4	1.18 mm	239	321	32.1	67.9	30-70	55-90	75-100	90-100
5	600 micron	205	526	52.6	47.4	15-34	35-59	60-79	80-100
6	300 micron	203	729	72.9	27.1	5-20	8-30	12-40	15-50
7	150 micron	191	920	92.0	8.0	0-10	0-10	0-10	0-15
8	Pan	80	1000	100.0	0.0	---	---	---	---

Result :The tested Sample Conforms to Grading Zone II

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TEST REPORT OF FINE AGGREGATE

Lab ID : CP-2022-09-12-01 Date: 15-09-22

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS 383:2016
1	Water Absorption(%)	1.5	-
2	Specific Gravity	2.59	-
3	Material finer than 75 micron(%)	6.9	Uncrushed fine Aggregate Max 3%, Crushed Fine aggregate Max 15%, Mixed Fine aggregate Max 12%, Manufactured Fine aggregate Max 10%

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

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****End of Report****

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Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID	:	CP-2022-09-12-01 **Date: 15-09-22**
Project Name	:	PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants
Agency	:	Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045
Customer Reference	:	EE(Project)/Ynk Zone/WO/020/2022-23
Date of Receipt	:	12-09-22
Sample Type/ Size	:	20mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2021 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	12-09-22

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:

Total weight taken : 5000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	40 mm	0	0	0	100	100
2	20 mm	255	255	5.1	94.9	90-100
3	10 mm	2789	3044	60.9	39.1	25-55
4	4.75 mm	1545	4589	91.8	8.2	0-10
5	Pan	411	5000	100	0	-

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Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : **CP-2022-09-12-01** **Date: 15-09-22**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	13.2	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	12.4	
3	Specific Gravity	2.65	-
4	Bulk Density(Loose) (Kg/l)	1.53	-
5	Bulk Density(Compacted) (Kg/l)	1.55	-
6	Water Absorption(%)	0.22	-
7	Aggregate crushing Value(%)	24.1	Max 30% for Aggregates to be used in concrete for wearing Surface, In case Aggregate Crushing Value Exceeds 30% then the test for ten percent fines should be conducted for Aggregates to be used in concrete other than for wearing Surface.
8	Aggregate Impact Value(%)	23.8	30% for Aggregates to be used in concrete for wearing Surface. 45% for Aggregates to be used in concrete other than for wearing Surface

* The results obtained are satisfactory as per standard requirements.

CIVIL Pro Sig Date BANGALORE

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Technical Manager

End of Report

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Format No: CP/TF/01

TEST RESULTS OF STEEL

Lab ID	:	**CP-2022-09-12-01** **Date: 13-09-22**
Project Name	:	PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants
Agency	:	Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045
Customer's Reference	:	EE(Project)/Ynk Zone/WO/020/2022-23
Date of Receipt	:	12-09-22
Sample Type	:	A-One Gold
Reference to BIS codes	:	IS 1786-2008, IS:1608-2005(RA 2011), IS 1599-2019.
Date of test:	:	12-09-22

Sl.No	*Identification of* sample	*Grade of* the sample	*Diameter* of the steel bar	*Weight* of the sample	*Yield* stress	*Tensile* strength	*Elongation*	*Bend test*	*Rebend test*
			(mm)	(kg/m)	(N/mm2)	(N/mm2)	(%)		
1	A-One Gold	Fe500	8	0.372	518	656	20.0%	Satisfactory	Satisfactory
2	A-One Gold	Fe500	10	0.629	539	682	20.0%	Satisfactory	Satisfactory

* The results obtained are satisfactory as per standard requirements.

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Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID	:	**CP-2022-09-12-01** **Date: 15-09-22**
Project Name	:	PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants
Agency	:	Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045
Customer's Reference	:	EE(Project)/Ynk Zone/WO/020/2022-23
Date of Receipt	:	12-09-22
Sample Type	:	JSW 53grade
Reference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification . IS 4031 (Part 1,2 3,4,5, 6,11) 1988 IS 4031 Part 1 (RA 2021) DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4 IS 4031 Part 2, (RA 2018) Determination of Fineness by Blaine Air Permeability IS 4031 Part 3, (RA 2019) Determination of Soundness, Clause 5, Clause 6 IS 4031 Part 4, (RA 2019) Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 5, (RA 2019) Determination of Initial & Final Setting Time, Clause 5 IS 4031 Part 11, (RA 2019)DETERMINATION OF DENSITY , Clause 6
Date of test	:	13-09-22
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	Fineness by dry sieving (%)	2.55	–
2	Finess by Air permeablity method (m^2/kg,Min)	287.5	225m^2/kg. Min
3	Density (gm/cc)	3.12	–
4	Standard Consistency (%)	28.5%	Not specified
5	Initial Setting time	155 minutes	Not less than 30 minutes
6	Final Setting time	260 minutes	Not more than 600 minutes
7	Soundness (Le Chatelier's Method)	2mm	Not more than 10 mm

* The results obtained are satisfactory as per standard requirements.

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****End of Report****

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Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID	:	**CP-2022-09-12-01** **Date: 11-10-22**
Project Name	:	PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants
Agency	:	Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045
Customer's Reference	:	EE(Project)/Ynk Zone/WO/020/2022-23
Date of Receipt	:	12-09-22
Sample Type	:	JSW 53grade
Reference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 Part 4, (RA 2019) Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 6, (RA 2019) Determination of Compressive Strength, Clause 6
Date of test	:	13-09-22
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

Compressive Strength

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	3 Days	29.5N/mm^2	Not less than 27 N/mm^2
2	7 Days	39.5N/mm^2	Not less than 37 N/mm^2
3	28 Days	57.5N/mm^2	Not less than 53 N/mm^2

* The results obtained are satisfactory as per standard requirements.

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Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Date: 23/09/2022

Lab ID	:	**CP-2022-09-20-01**
Project Name	:	PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants
Agency	:	Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045
Customer's Reference	:	EE(Project)/Ynk Zone/WO/020/2022-23
Date of Receipt	:	20-09-22
Customer ID	:	Drain Bottom Raft- 4th Cross
Sample Type /Size	:	150X150X150 mm
Sample grade/Age	:	M20 / 7 Days Compressive Strength
Reference to BIS codes	:	IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5
Date of test	:	23/09/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen	Cross sectional area	Weight of the sample	Failure Load	Compressive strength	Average Compressive Strength
					(mm)	(Sq.mm)	(kg)	(KN)	(N/mm^2)	(N/mm^2)
1	Drain Bottom Raft-4th Cross	M20	16/09/2022	23/09/2022	150.55 X 149.82 X 150.13	22555	8.561	419.4	18.6	18.5
2	Drain Bottom Raft-4th Cross	M20	16/09/2022	23/09/2022	149.38 X 149.64 X 150.93	22353	8.133	403.5	18.1	
3	Drain Bottom Raft-4th Cross	M20	16/09/2022	23/09/2022	150.92 X 151.79 X 149.84	22908	8.372	430.9	18.8	

* The results obtained are satisfactory as per standard requirements.

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Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID	:	**CP-2022-09-20-01** **Date: 14/10/2022**
Project Name	:	PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants
Agency	:	Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045
Customer's Reference	:	EE(Project)/Ynk Zone/WO/020/2022-23
Date of Receipt	:	20-09-22
Customer ID	:	Drain Bottom Raft- 4th Cross
Sample Type /Size	:	150X150X150 mm
Sample grade/Age	:	M20 / 28 Days Compressive Strength
Reference to BIS codes	:	IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5
Date of test	:	14/10/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Drain Bottom Raft-4th Cross	M20	16/09/2022	14/10/2022	151.16 X 151.39 X 149.84	22884	8.918	536.3	23.4	23.2
2	Drain Bottom Raft-4th Cross	M20	16/09/2022	14/10/2022	151.51 X 151.05 X 150.16	22887	8.543	520.2	22.7	
3	Drain Bottom Raft-4th Cross	M20	16/09/2022	14/10/2022	150.63 X 150.69 X 149.95	22698	8.891	528.9	23.3	

* The results obtained are satisfactory as per standard requirements.

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Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Date: 30/09/2022

Lab ID	:	**CP-2022-09-24-01**
Project Name	:	PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants
Agency	:	Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045
Customer's Reference	:	EE(Project)/Ynk Zone/WO/020/2022-23
Date of Receipt	:	24-09-22
Customer ID	:	Drain Bottom Raft- 4th A Cross
Sample Type /Size	:	150X150X150 mm
Sample grade/Age	:	M20 / 7 Days Compressive Strength
Reference to BIS codes	:	IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5
Date of test	:	30/09/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Drain Bottom Raft-4th A Cross	M20	23/09/2022	30/09/2022	151.08 X 151.04 X 151.88	22819	8.977	419.3	18.4	18.4
2	Drain Bottom Raft-4th A Cross	M20	23/09/2022	30/09/2022	149.61 X 149.17 X 150.26	22317	8.352	410.1	18.4	
3	Drain Bottom Raft-4th A Cross	M20	23/09/2022	30/09/2022	150.80 X 151.76 X 149.45	22884	8.646	422.3	18.5	

* The results obtained are satisfactory as per standard requirements.

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Technical Manager

CIVIL Pro Sig..... Date..... BANGALORE

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Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : **CP-2022-09-24-01** **Date: 21/10/2022**

Project Name : PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants

Agency : Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045

Customer's Reference : EE(Project)/Ynk Zone/WO/020/2022-23

Date of Receipt : 24-09-22

Customer ID : Drain Bottom Raft- 4th A Cross

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M20 / 28 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5

Date of test : 21/10/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Drain Bottom Raft-4th A Cross	M20	23/09/2022	21/10/2022	151.77 X 150.61 X 149.50	22859	8.403	527.8	23.1	23.0
2	Drain Bottom Raft-4th A Cross	M20	23/09/2022	21/10/2022	149.29 X 150.24 X 151.15	22429	8.417	509.8	22.7	
3	Drain Bottom Raft-4th A Cross	M20	23/09/2022	21/10/2022	149.68 X 150.19 X 151.47	22480	8.283	524.2	23.3	

* The results obtained are satisfactory as per standard requirements.

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CIVIL PRO BANGALORE Sig. Date

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Format No: CP/TF/01

TEST REPORT OF FINE AGGREGATE

Lab ID	:	**CP-2022-09-24-01** **Date: 26-09-22**
Project Name	:	PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants
Agency	:	Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045
Customer's Reference	:	EE(Project)/Ynk Zone/WO/020/2022-23
Date of Receipt	:	24-09-22
Sample Type	:	Fine Aggregate (M-Sand)
Reference to BIS codes	:	IS 383 : 2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1, 3) RA2012 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption
Date of test	:	24-09-22
Total weight taken	:	1000 grams

Sl.no	Sieve Size	Weight Retained (gms)	Cumulative Weight Retained (gms)	% Cumulative Weight Retained	% Passing	Requirement as per IS 383:2016			
						Grading Zone I	Grading Zone II	Grading Zone III	Grading Zone IV
1	10 mm	0	0	0.0	100.0	100	100	100	100
2	4.75 mm	27	27	2.7	97.3	90-100	90-100	90-100	95-100
3	2.36 mm	65	92	9.2	90.8	60-95	75-100	85-100	95-100
4	1.18 mm	215	307	30.7	69.3	30-70	55-90	75-100	90-100
5	600 micron	205	512	51.2	48.8	15-34	35-59	60-79	80-100
6	300 micron	206	718	71.8	28.2	5-20	8-30	12-40	15-50
7	150 micron	191	909	90.9	9.1	0-10	0-10	0-10	0-15
8	Pan	80	989	98.9	1.1	---	---	---	---
Result :The tested Sample Conforms to Grading Zone II									

CIVIL PRO Sig Date BANGALORE

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TEST REPORT OF FINE AGGREGATE

Lab ID : **CP-2022-09-24-01** **Date: 26-09-22**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS 383:2016
1	Water Absorption(%)	1.6	–
2	Specific Gravity	2.63	–
3	Material finer than 75 micron(%)	6.8	Uncrushed fine Aggregate Max 3%, Crushed Fine aggregate Max 15%, Mixed Fine aggregate Max 12%, Manufactured Fine aggregate Max 10%

* The results obtained are satisfactory as per standard requirements.

CIVIL PRO Sig Date BANGALORE

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Authorized Signatory
Technical Manager

****End of Report****

6A

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID	:	CP-2022-09-24-01 **Date: 26-09-22**
Project Name	:	PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants
Agency	:	Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045
Customer Reference	:	EE(Project)/Ynk Zone/WO/020/2022-23
Date of Receipt	:	24-09-22
Sample Type/ Size	:	20mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2021 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	24-09-22

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:

Total weight taken : **5000** grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	40 mm	0	0	0	100	100
2	20 mm	272	272	5.4	94.6	90-100
3	10 mm	2758	3030	60.6	39.4	25-55
4	4.75 mm	1759	4789	95.8	4.2	0-10
5	Pan	211	5000	100	0	-

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Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID : **CP-2022-09-24-01** **Date: 26-09-22**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	10.2	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	9.6	
3	Specific Gravity	2.63	_
4	Bulk Density(Loose) (Kg/l)	1.45	_
5	Bulk Density(Compacted) (Kg/l)	1.51	_
6	Water Absorption(%)	0.22	_
7	Aggregate crushing Value(%)	22.2	Max 30% for Aggregates to be used in concrete for wearing Surface, In case Aggregate Crushing Value Exceeds 30% then the test for ten percent fines should be conducted for Aggregates to be used in concrete other than for wearing Surface.
8	Aggregate Impact Value(%)	22.9	30% for Aggregates to be used in concrete for wearing Surface. 45% for Aggregates to be used in concrete other than for wearing Surface

* The results obtained are satisfactory as per standard requirements.

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R RUDRAPRASAD
Authorized Signatory
Technical Manager

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Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID	:	**CP-2022-09-24-01** **Date: 29-09-22**
Project Name	:	PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants
Agency	:	Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangaloee-560045
Customer's Reference	:	EE(Project)/Ynk Zone/WO/020/2022-23
Date of Receipt	:	24-09-22
Sample Type	:	JSW 53grade
Reference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 (Part 1,2 3,4,5, 6,11) 1988 IS 4031 Part 1 (RA 2021) DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4 IS 4031 Part 2, (RA 2018) Determination of Fineness by Blaine Air Permeability IS 4031 Part 3, (RA 2019) Determination of Soundness, Clause 5, Clause 6 IS 4031 Part 4, (RA 2019) Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 5, (RA 2019) Determination of Initial & Final Setting Time, Clause 5 IS 4031 Part 11, (RA 2019)DETERMINATION OF DENSITY , Clause 6
Date of test	:	25-09-22
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	Fineness by dry sieving (%)	1.22	–
2	Finess by Air permeablity method (m^2/kg,Min)	289.5	225m^2/kg, Min
3	Density (gm/cc)	3.11	–
4	Standard Consistency (%)	27.5%	Not specified
5	Initial Setting time	170 minutes	Not less than 30 minutes
6	Final Setting time	260 minutes	Not more than 600 minutes
7	Soundness (Le Chatelier's Method)	1.5mm	Not more than 10 mm

* The results obtained are satisfactory as per standard requirements.

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Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID	:	**CP-2022-09-24-01** **Date: 24-10-22**
Project Name	:	PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants
Agency	:	Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045
Customer's Reference	:	EE(Project)/Ynk Zone/WO/020/2022-23
Date of Receipt	:	24-09-22
Sample Type	:	JSW 53grade
Reference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 Part 4, (RA 2019) Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 6, (RA 2019) Determination of Compressive Strength, Clause 6
Date of test	:	25-09-22
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

Compressive Strength

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	3 Days	29.5N/mm^2	Not less than 27 N/mm^2
2	7 Days	39.5N/mm^2	Not less than 37 N/mm^2
3	28 Days	57.5N/mm^2	Not less than 53 N/mm^2

* The results obtained are satisfactory as per standard requirements.

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Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : **CP-2022-09-25-01** **Date: 03/10/2022**

Project Name : PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants

Agency : Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045

Customer's Reference : EE(Project)/Ynk Zone/WO/020/2022-23

Date of Receipt : 26-09-22

Customer ID : Drain Side Wall- Muneshwara Layout 4th Cross

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M20 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5

Date of test : 02/10/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen	Cross sectional area	Weight of the sample	Failure Load	Compressive strength	Average Compressive Strength
					(mm)	(Sq.mm)	(kg)	(KN)	(N/mm^2)	(N/mm^2)
1	Drain Side Wall-Muneshwara Layout 4th Cross	M20	25/09/2022	02/10/2022	151.38 X 150.38 X 150.81	22763	8.909	432.1	19.0	18.7
2	Drain Side Wall-Muneshwara Layout 4th Cross	M20	25/09/2022	02/10/2022	150.92 X 151.65 X 149.44	22888	8.764	431.4	18.8	
3	Drain Side Wall-Muneshwara Layout 4th Cross	M20	25/09/2022	02/10/2022	149.05 X 149.78 X 150.35	22325	8.951	406.7	18.2	

* The results obtained are satisfactory as per standard requirements.

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Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : **CP-2022-09-25-01**

Date: 24/10/2022

Project Name : PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants

Agency : Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045

Customer's Reference : EE(Project)/Ynk Zone/WO/020/2022-23

Date of Receipt : 26-09-22

Customer ID : Drain Side Wall- Muneshwara Layout 4th Cross

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M20 / 28 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5

Date of test : 23/10/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen	Cross sectional area	Weight of the sample	Failure Load	Compressive strength	Average Compressive Strength
					(mm)	(Sq.mm)	(kg)	(KN)	(N/mm^2)	(N/mm^2)
1	Drain Side Wall-Muneshwara Layout 4th Cross	M20	25/09/2022	23/10/2022	149.15 X 151.93 X 151.09	22660	8.630	542.5	23.9	23.5
2	Drain Side Wall-Muneshwara Layout 4th Cross	M20	25/09/2022	23/10/2022	150.34 X 149.59 X 149.42	22490	8.601	514.3	22.9	
3	Drain Side Wall-Muneshwara Layout 4th Cross	M20	25/09/2022	23/10/2022	150.31 X 150.05 X 150.93	22554	8.908	536.3	23.8	

* The results obtained are satisfactory as per standard requirements.

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Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : **CP-2022-10-01-01** **Date: 07/10/2022**

Project Name : PACKAGE No-05 Development of Roads and Drains at Kasagattapura, Vaderahalli, Shivakote, Kachohalli Grama Panchayathi Limits and Surrounding Areas of Yelehanka Assembly Constituency Under Amrutha Nagarothana Grants

Agency : Sri. K Gopireddy, No.03, 1st Cross, 1st Main, Ramachandrappa Layout, Veeranapalya, Arabic College Post, Bangalore-560045

Customer's Reference : EE(Project)/Ynk Zone/WO/020/2022-23

Date of Receipt : 01-10-22

Customer ID : Drain Bottom Raft- 3rd Cross Road

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M20 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5

Date of test : 07/10/2022

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen	Cross sectional area	Weight of the sample	Failure Load	Compressive strength	Average Compressive Strength
					(mm)	(Sq.mm)	(kg)	(KN)	(N/mm^2)	(N/mm^2)
1	Drain Bottom Raft-3rd Cross Road	M20	30/09/2022	07/10/2022	150.72 X 150.27 X 150.51	22649	8.542	414.7	18.3	18.6
2	Drain Bottom Raft-3rd Cross Road	M20	30/09/2022	07/10/2022	151.21 X 151.57 X 149.33	22918	8.433	432.5	18.9	
3	Drain Bottom Raft-3rd Cross Road	M20	30/09/2022	07/10/2022	150.57 X 149.48 X 149.71	22507	8.356	422.0	18.8	

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro,

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